



# UNITED STATES PATENT AND TRADEMARK OFFICE

CW

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,799	01/10/2002	Erwin Roy John	50124/00303	5663

7590

07/10/2003

Fay Kaplun & Marcin, LLP  
17th Floor  
100 Maiden Lane  
New York, NY 10038

EXAMINER
----------

NASSER, ROBERT L

ART UNIT	PAPER NUMBER
----------	--------------

3736

DATE MAILED: 07/10/2003

S

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/045,799

Applicant(s)

JOHN ET AL.

Examiner

Robert L. Nasser

Art Unit

3736

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 45-68 is/are pending in the application.
- 4a) Of the above claim(s) 45-47 and 52-67 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 48-51 and 68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 3736

Applicant's election of Species II, claims 48-51 and 68 is acknowledged.

Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The examiner notes that applicant listed claims 45-66 and 68 as being drawn to the elected embodiment. However, claim 45 recites using two stimulation frequencies. This is shown in version I or III, but not version II and hence claims 45-47 are not drawn to the elected embodiment. In addition, claim 52 recites comparing the brainwaves to a known pattern of brain waves. This is drawn to the embodiment of version IV. Hence, claims 52-66 are not drawn to the elected embodiment.

Claims 50 and 51 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 50 recites that the filter selects the frequency band. However, in the discussion of version two, it is clear that the frequency band is selected by adjusting knob 61. Clarification is required.

Claim 68 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant recites connection means in claim 68 with no associated function. It is therefore unclear whether or not applicant is intending to invoke 35 U.S.C. 112, sixth paragraph. Applicant should clarify the issue.

Art Unit: 3736

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 49-52 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartzell et al in view of Zimmerman et al and Devito. Hartzell shows a device with an active electrode 46 producing EEG signals, an amplifier 54 for amplifying the signals, a filter producing signals in a predetermined frequency range (alpha, beta, theta), and a tone generator producing an output corresponding to the signal. It does not have the connection means or the telemetry signal. Zimmerman et al teaches that it is desirable to have the electrode arrangement wirelessly communicate with the processor to allow the user freedom of movement during measurement. Hence, it would have been obvious to modify Hartzell to use wireless communication, so as to allow the patient to move around. In addition, DeVito shows a wireless EEG headband device. It would have been obvious to modify the above combination to use such a headband, as it is merely the substitution of one known equivalent EEG electrode device for another.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

All of Pavel, Bakerich et al, Lee, Shiga, and Anderson produce an audio output corresponding to the state of an EEG signal.

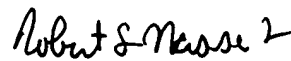
Allain et al and Kwon show devices for monitoring brain life or injury.

Art Unit: 3736

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert L. Nasser whose telephone number is (703) 308-3251. The examiner can normally be reached on MAXIFLEX.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (703) 308-3130. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-0758 for regular communications and (703) 308-0758 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.



Robert L. Nasser  
Primary Examiner  
Art Unit 3736

RLN  
July 3, 2003

**ROBERT L. NASSER**  
**PRIMARY EXAMINER**